

AMENDMENTS TO THE CLAIMS

This listing of claims replaces all prior versions, and listings, of claims in the application:

Listing of Claims:

1 – 16. (Cancelled)

17. (Currently Amended) A method that facilitates message processing, the method performed within a computer comprising one or more processors and computer system memory, the method comprising:

requesting one or more messages;

storing the one or more messages in order;

determining from information associated with the one or more messages that each of the one or more messages belongs to a conversation group, the conversation group comprising a conversation group topology which comprises a plurality of dialogs, each dialog comprising a plurality of the one or more messages;

linking the one or more messages by a unique group identifier;

opening a conversation corresponding to the conversation group;

locking the conversation group, the lock preventing a disparate requestor from accessing the one or more messages linked by the unique group identifier;

tracking the conversation corresponding to the conversation group;

providing exclusive serial access to the messages linked by the unique group identifier such that only one service can process linked messages at any time and such that the messages are processed in order;

upon a new message arriving, dynamically associating the new message with the locked conversation group such that the new message inherits the lock and the disparate requestor is prevented from accessing the new message;

while providing exclusive serial access to the messages linked by the unique group identifier, providing concurrent processing of one or more messages not linked by the unique group identifier;

when a reader has finished processing the linked messages, receiving a notification from the reader to release the lock on the conversation group; and

releasing the lock.

18. (Previously Presented) The method of claim 17, further comprising:

receiving one or more related messages;

associating the related messages with the conversation group; and

ordering the related messages to mitigate out-of-order processing.

19. (Previously Presented) The method of claim 17, further comprising updating the conversation group with incoming related messages.

20. (Original) The method of claim 17, further comprising utilizing a conversation group identifier to lock the conversation group.

21. (Original) The method of claim 17, further comprising storing the messages in-order.

22. (Currently Amended) A method that facilitates message processing, the method performed within a computer comprising one or more processors and computer system memory, the method comprising:

receiving a request for a message;

determining from information associated with the message that message belongs to a conversation group, the conversation group comprising a conversation group topology which comprises a plurality of dialogs, each dialog comprising a plurality of the one or more messages;

associating the message and other related messages with a conversation group identified by a unique group identifier;

opening a conversation corresponding to the conversation group;

locking the conversation group via the unique group identifier, the lock preventing a disparate requestor from accessing the one or more messages linked by the unique group identifier;

tracking the conversation corresponding to the conversation group;

providing exclusive serial access to one or more messages of the conversation group identified by the unique group identifier to the requestor such that the messages are processed in order;

upon a new message arriving, dynamically associating the new message with the locked conversation group such that the new message inherits the lock and the disparate requestor is prevented from accessing the new message;

while providing exclusive serial access to the one or more messages of the conversation group, providing concurrent processing of one or more messages not linked by the unique group identifier;

when the requestor has finished processing the linked messages, receiving a notification from the requestor to release the lock on the conversation group; and

releasing the lock.

23. (Original) The method of claim 22, further comprising utilizing message identifiers to determine whether messages are related.

24. (Original) The method of claim 22, further comprising receiving the conversation group identifiers to associate with the conversation group.

25. (Original) The method of claim 22, further comprising dynamically updating the conversation group with incoming related messages.

26 – 28. (Cancelled)

29. (Currently Amended) A computer readable storage ~~medium—device~~ storing computer executable instructions which when executed upon one or more computer processors facilitate message processing by causing the processors to perform the method of claim 17.

30. (Cancelled)